

I. Amendments to the Specification

Kindly amend as-filed paragrph [0069] (published-application paragraph [0075]), as follows:

[0069] The present inventors have realized that for a desired angular span δ between propagation directions of the beams with desired wavelengths λ_1 and λ_2 , the astigmatism introduced by the grating reaches a minimum in the entire working spectral range when the axis of the incident beam is perpendicular to the fringes, and creates, with normal to the grating, the angle α (Fig. 5B), given by the equation:

$$\alpha = \text{atg} \left[\frac{\lambda_2 + \lambda_1}{\lambda_2 - \lambda_1} \cdot \text{tg} \left(\frac{\delta}{4} \right) \right] \quad (2)$$

and, simultaneously, when the period of the grating d , fulfills the condition:

$$d = \frac{\lambda_2 - \lambda_1}{2 \cdot \cos(\alpha) \cdot \sin\left(\frac{\delta}{2}\right)} = \frac{\sqrt{(\lambda_2 - \lambda_1)^2 + (\lambda_2 + \lambda_1)^2 \cdot \text{tg}^2\left(\frac{\delta}{4}\right)}}{2 \cdot \sin\left(\frac{\delta}{2}\right)} \quad (3)$$

The wavelength λ_0 on axis of the fan, given by equation:

$$\lambda_0 = 2 \cdot d \cdot \sin(\alpha) \quad (4)$$

is free of the astigmatism and is always a bit longer than the central wavelength

$\lambda_c = (\lambda_1 + \lambda_2) / 2$ of the used band. Where "atg" = arctangent; "tg" = tangent; "cos" = cosine; and "sin" = sine.